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(54) Methods for detecting a target nucleic acid in a sample.

(57) This invention relates to improved methods for nucleic acid detection using amplification methods such as the polymerase chain reaction (PCR). More specifically, the invention provides methods for simultaneous amplification and detection to enhance the speed and accuracy of prior methods. The methods involve the introduction of detectable DNA binding agents into the amplification reaction, which agents produce a detectable signal that is enhanced upon binding double-stranded DNA. In a preferred embodiment, the binding agent is a fluorescent dye. The methods also provide means for monitoring the increase in product DNA during an amplification reaction.

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| Place of search BERLIN | | Date of completion of the search 14 DECEMBER 1992 | Examiner DE KOK A.J. |
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| X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure F : intermediate document | | T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- A : member of the same patent family, corresponding document | |

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